DOCUMENT RESUME

ED 047 885 RC 005 158

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TITLE Orientation, Pre-School and Pre-Kindergarten Summer Programme for Indian Children.
INSTITUTION Educational Research Inst. of British Columbia, Vancouver.
SPONS AGENCY Canadian Dept. of Indian Affairs and Northern Development, Toronto (Ontario). Education Div.; Victoria Univ., British Columbia.
REPORT NO R-4
PUB DATE Jul 68
NOTE 50p.

EDRS PRICE EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS *American Indians, *Concept Formation, Elementary School Students, *Language Development, *Perceptual Development, Preschool Children, *Preschool Programs, Program Descriptions, Reading Instruction, Self Concept, Summer Programs, Teacher Aides, Verbal Development
IDENTIFIERS *Vancouver Island

ABSTRACT

The University of Victoria and the Canadian Department of Indian Affairs sponsored a 4-week prekindergarten, preschool, and orientation program for Indian children living on 4 reserves in the southern region of Vancouver Island. The 3 groups of children served were 4- and 5-year-olds (prekindergarten), 5- and 6-year-olds (preschool), and 7- through 13-year-olds (orientation with emphasis on individualized oral reading and "games" geared to processing information at levels other than memory). General goals for the overall program focused on 3 behavioral domains. In the cognitive domain, attention was focused on increasing the quality and quantity of verbalization patterns; on extending knowledge of English language structure; on increasing ability to comprehend and apply information; and on enabling the children to analyze, synthesize, and evaluate on the basis of knowledge gained. In the affective area, activities were designed to increase the ability to receive and attend to relevant stimuli; to respond appropriately and effectively in specific situations; to gain self-confidence; and to develop an increasing awareness of, and interest in, books and reading. In the psychomotor domain, both indoor and outdoor activities were structured to enable pupils to refine perceptual skills and to increase proficiencies in both gross and fine motor abilities. Program evaluation consisted of pupil assessment by faculty members and teaching aides. Some of the more evident trends are noted in the document, and tables provide statistical support for the findings. (JH)

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## ORIENTATION, PRE-SCHOOL AND PRE-KINDERGARTEN SUMMER PROGRAMME FOR INDIAN CHILDREN

*C. Galloway, N. Mickelson, D. Burchfield*

# STUDIES & REPORTS

*PUBLISHED BY THE EDUCATIONAL RESEARCH INSTITUTE OF B.C.*
BOARD OF TRADE TOWER, 1177 WEST HASTINGS STREET, VANCOUVER 1, BRITISH COLUMBIA

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UNIVERSITY OF VICTORIA

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Orientation, Pre-School, and Pre-Kindergarten

Summer Programme for Indian Children

July, 1968

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## I. Introduction

Martin Deutsch (1965) and his associates have been conducting a series of developmental studies with reference to the relationship between social class and race, and language and thought. Their data are of practical interest to teachers because the findings focus upon factors associated with aspects of language development so intimately related to reading. Furthermore, their data are of theoretical interest in that the findings are related to a broadly conceived "cumulative deficit hypothesis" which has as one of its bases the idea that the lack of appropriate language stimulation in early home and school life makes success in school activities progressively more difficult with age.

With respect to school learning, Deutsch (1965) says: "If language cannot be used as an elaborating form of communication, school loses much of its socializing and teaching capabilities, regardless of the curriculum content." In addition, particularly in relation to the concept of reading readiness, Deutsch argues that for children who experience language difficulties associated with lower social status and possibly race, the all too minor adjustments made by schools to readiness for reading are completely unrealistic. He argues that such children need saturation in language experience both before school and especially during early school years. His plea would appear to be for a more aggressive and dynamic implementation of the

concept of "language readiness" for such children. He notes: "While we can accept that some of this cumulative deficiency is associated with inadequate early preparation because of corresponding environmental deficiencies, the adequacy of the school environment also must be questioned" (p.80).

With this frame of reference, the University of Victoria in cooperation with the Department of Indian Affairs during the summer of 1968 sponsored a four-week pre-kindergarten, pre-school, and orientation enrichment programme for Indian children living on four reserves in the southern region of Vancouver Island. Children in the three classes were ages 3 - 4 years, 5 - 6 years, and 7 - 13 years respectively.

Financing for the project was jointly shared by the two sponsoring groups. The teaching staff consisted of two faculty members from the University of Victoria, one visiting lecturer who had previous experience with American "Head-Start" programmes and six teen-aged Indian girls who acted as teaching aides.

General programme planning was a cooperative effort of the University faculty team and representatives of the community involved. The instructional programme, however, was the sole responsibility of the University of Victoria faculty members.

In assessing the experiential background of the pupils enrolled in the programme, the faculty felt that the following were characteristic of the cultural milieu in which the children lived:

1. Indian communities .... do not stress oral language.

2. Indian communities function without the benefit of full literacy .... yet most Indians are potentially avid readers provided the printed matter is of direct interest to them.
3. Indian communities are still functioning in a pre-scientific and empirical way.
4. Indian communities, particularly on reserves, are traditional.
5. Indian communities are homogeneous .... inbreeding is constant.
6. Indian societies and communities are still not part of the industrialized society.
7. .... Indian societies do not fully operate on the dollar system. They do not buy water, nor pay rent. Most government services come to them without a price ....
8. .... Indian communities are still simple and undiversified .... most social planning is either informal, traditional or non-existent.
9. Individuals in each Indian community are aware of an extensive amount of interdependence with their fellow man inside the group .... each Indian community considers itself as a "we" and looks at the outside world as "they".
10. Indian communities are aware that in some way they are more Canadian than all other communities (Provincial Report, 1968).

In addition many of the children in the programme appeared to manifest some of the characteristics referred to in the large body of literature now available on children who do not seem to profit fully from school experience.

1. Lack of self confidence.
2. Paucity of educational stimulus in the home.
3. Inadequate physical care and undernourishment.
4. Impoverishment of language skills.

Generally, then, it seems realistic to suggest that many of the children enrolled in the programme demonstrated characteristics common to children who do not achieve well in school and simultaneously to Canadian Indian children currently living on reserves.

## II. General Goals

General goals were structured for the over-all programme and subsequently specific behavioral objectives formulated for each of the three groups of children. Bloom's (1956) classification was used for the cognitive domain, Krathwohl's (1964) for the affective area and Simpson's (1966-67) for the psychomotor domain.

Generally, in the cognitive area, attention was focused on increasing the quality and quantity of children's verbalization patterns, on extending the children's knowledge of the structure of the English language, on increasing the pupils' abilities to comprehend and apply information, and on enabling

the children to analyze, synthesize, and evaluate on the basis of knowledge gained.

In the affective area, activities were designed to increase the children's abilities to receive and attend to relevant stimuli, to respond appropriately and effectively in specific situations, to gain in self-confidence, to realize that they might be successful in school, and to develop an increasing awareness of and interest in books and reading.

In the psychomotor domain, both indoor and outdoor activities were structured in order to enable the pupils to refine their perceptual skills and to increase their proficiencies in both gross and fine motor abilities.

There were certain general goals for the programme which did not fit into the general classification of objectives. Among these were the following:

1. To gather and communicate relevant information about each child to personnel involved in the regular school programme.
2. To provide practical experience for students enrolled in other related summer-session courses.
3. To enable University faculty members to gain in practical field experience, to explore the parameters of instructional techniques for educationally unsuccessful children, and to evaluate theories and programmes currently in the literature relevant to the education of such children.

4. To gather material for use in helping student teachers relate theory to practice. Television tapes, tape recorded samples of verbalization patterns, and slides were among the media used.
5. To train Indian teen-aged aides to work successfully with young children in order to develop initiative and skill in caring for children at home.
6. To enable Indian teen-aged girls to interact effectively with their white "significant-others" (teachers).

III. Specific Objectives

Specific, behavioral objectives were outlined and programmed in order that curricular activities and evaluative procedures would have functional relevance in relation to general goals. In the pre-kindergarten group, the emphasis was largely in the affective area. Children were guided to receive and attend to relevant stimuli and were encouraged to follow a regular routine in order to increase their demonstrable success in school.

In the pre-school group, the main emphases were centered around increasing the quantity and quality of the verbalizations of the children. Pupils were encouraged to speak in sentences and a great deal of progress was made by having children describe their art work.

In both the pre-school group and the orientation class, the children were expected to demonstrate growing competency in such areas as the following:

1. Increasing the frequency and length of verbal responses made in conversation and in response to questions asked.
2. Improving the quality of verbal responses in terms of being able to make statements about factual information which appeared to reflect ability to deal with information in the following ways:
   a) to translate printed thoughts into the pupils' own words.
   b) to interpret information in terms of meaning being conveyed.
   c) to apply ideas or meanings gained in one context to a related context.
   d) to analyze information (to be able to verbalize a moral found in a fable, for example).
   e) to synthesize a series of bits of information into a new or different pattern (to construct original stories which contained certain specified elements).
   f) to evaluate the merits of information given in terms of some specified criteria.

3. Improving the child's verbal facility especially within the areas of:
   a) asking for information
   b) giving information to others
   c) explaining to others.
4. Increasing the child's functional knowledge of the structure of English.
5. Increasing the child's use of books.
6. Enabling the child to classify, sort, and categorize on the basis of the following concepts:
   a) colour
   b) size
   c) shape
7. Increasing the child's competency with number:
   a) one-to-one correspondence
   b) two-to-one correspondence
   c) counting to 100 with help at the decade points.

In all groups, specific objectives were outlined in the psychomotor domain. Activities were planned to:

1. Enable the child to refine his perceptual abilities:
   a) visual
   b) auditory
   c) tactile-kinesthetic

d) smell

e) taste.

2. Increase the child's ability to respond to relevant stimuli (relating perception to action):

a) imitating sounds heard

b) copying shapes seen

c) discriminating size and shape to solve puzzles.

3. Increase the child's competency in both gross and fine motor activities:

a) ball skills

b) jumping skills

c) balance activities

d) manual dexterity.

## IV. The Programme

### Pre-Kindergarten Group (Ages 4 - 5)

| | Daily Programme |
|---|---|
| 8:30 - 9:00 a.m. | Arrival<br>Personal greetings by teacher and aides<br>Toileting, washing |
| 9:00 - 9:10 a.m. | Conversation, planning |
| 9:10 - 10:00 a.m. | Free choice of activities<br>- block corner<br>- science corner |

| | |
|---|---|
| | - water play |
| | - art |
| | - housekeeping |
| | - table toys; puzzles, games |
| | - library corner |
| 10:00 - 10:30 a.m. | Clean-up, preparation for snack |
| | Toileting, washing |
| | Snack - milk and cookies |
| | Brief rest period |
| 10:30 - 11:00 a.m. | Outdoor play |
| | - swings, slides |
| | - occasional nature walks, field trips |
| 11:00 - 11:30 a.m. | Story time |
| | Flannel board activities |
| | Finger plays |
| | Music and rhythms: simple songs |
| Preparation for departure | Goodbyes |

Comments

Personal greetings developed a feeling of being wanted at school. A comment of a personal nature such as: "You have a red shirt, or new shoes" brought smiles and eventually a verbal response.

Free choice of activities was allowed and during this time the staff circulated around the class talking to the children. Blocks were available to develop manual and physical

skills. Children talked about them, built swimming pools, forts, castles, houses, and cars. An attempt was made to encourage activity and originality.

The science corner was designed to interest the children in the world about them. Children went on nature walks and picked up weeds. They looked at shells through the magnifying glass, felt things and watched tadpoles grow into frogs. They collected rocks and were encouraged to talk about everything they saw.

Water play was designed for children who didn't have confidence at first to enter into any activity. It was a popular activity, and perhaps because of its failure-proof nature appeared to be of most interest when used on an every-other-day basis. The children compared quantities, washed dishes, sailed boats, and found out what could float. They learned colours by adding food colouring to the water.

Art experiences such as painting with different types of media, brushes and sponges, were popular. The paint easel was set up each day. A special table was used for sponge painting, ink blots, and"thing painting" (anything that made an impression). The children dictated stories about each painting. At first, descriptions consisted of one word such as "house", "ball", At the end of the session one child said: "Frankenstein and his cat are sitting under a tree." This appeared to indicate success in meeting the objective of language development.

Housekeeping play appeared to be a good means of getting the children to work together. A small house was set up with a stove, sink, table, chairs, and refrigerator. Much language and social interaction developed here.

Table toys were used to help the children develop manual skills. Simple puzzles and games were used to increase pupils' attention span. During these activities children learned to share and to take turns.

In the library corner it was noted at first that there was definitely a lack of interest. Some children refused to listen to any type of stories. With the exception of one boy, they did not look at books. By the end of the second week, all children were interested in books and enjoyed having stories read to them. Many children sat and "read" the same story over and over to themselves. An attempt was made to read to each child every day.

General health practices were conducted each day before snack time. Children were guided to the washrooms and assisted to wash and dry their hands after using the toilet. During snack, milk and cookies, conversation was encouraged. The children were generally tired by mid-morning and a short ten minute rest and relaxation period was programmed.

Outdoor play was encouraged to develop skills in the psychomotor domain. Swings, slides, balls and jump ropes were used. Children were guided to take turns and play safely.

A very important time of the day was story time. The flannel board was used extensively. Simple stories and counting rhymes that were interesting and caught the children's attention were planned. Music activities were organized. Songs and records were used.

When it was time to leave, a short evaluation period was held with the children and each student spoken to as he left.

Involvement of aides:

1. Responsibility for record keeping:

   Attendance, notes, and a record of how children spent their time each day were kept.

2. Planning period each afternoon:

   Notes were reviewed. It was decided which activities were most valuable, and which were to be reinforced the next day. Discipline was discussed, particularly how to handle problem situtations. Lesson plans were structured for the next day.

3. Materials and activities:

   The aides helped also in making materials for classroom use. Flannel board materials, simple games using colours, a science collection, and a "feel and touch" center were among the materials developed.

4. Background information:

   Aides also gave invaluable information to the teacher in regard to the background of the children. This greatly helped the teacher's understanding and planning for daily activities.

Pre-School Group (Ages 5 - 6)

Daily Programme

| | |
|---|---|
| 8:30 - 9:00 a.m. | Arrival<br>Personal greetings to each child (3 adults)<br>Conversation - either individually with one adult or in groups. |
| 9:00 - 9:30 a.m. | Free activities .... Verbal experiences during entire time.<br>- block play<br>- painting<br>- puzzle solving<br>- doll play<br>- book house<br>- library corner<br>- modelling<br>- table toys |
| 9:30 - 9:50 a.m. | Attendance (discussion)<br>Rhythms, piano<br>Group conversation |
| 9:50 - 10:15 a.m. | Structured group activities<br>- verbal patterns and auditory experiences<br>- visual discrimination activities<br>- sorting and classifying activities |
| 10:15 - 10:30 a.m. | Snack and rest<br>Toileting and washing |

| | |
|---|---|
| 10:30 - 10:50 a.m. | Outside activities<br>- balls<br>- swings<br>- slides<br>- jumping, walking, running games |
| 10:50 - 11:20 a.m. | Story time<br>- flannel board activities<br>- finger plays<br>- individual story telling |
| 11:20 - 11:30 a.m. | Clean up, evaluation, good-bye to each child |
| 11:30 - 12:30 p.m. | Planning session with aides |
| 12:30 - 1:15 p.m. | Group lunch (teachers, aides and visitors) |

Comments

In formulating objectives and in planning activities for the pre-school class, the faculty member addressed herself to examining the apparent needs of the children as they came into the programme.

It was found that five of the children had already had some previous school experience and, therefore, that the range of behaviors was greater than might have been expected. This proved to be an advantage from one point of view in that these five children were able to act as "models" in setting behavior patterns for those children who had never had any "school" experience. On the other hand, the wide range of previous experience of the children necessitated careful planning on an individual

basis to ensure that each child's programme was challenging while at the same time realistic in terms of possible successes.

One of the major areas of concern revolved around the methodology employed to increase the quantity and quality of the children's verbalization. A careful appraisal was made of the techniques outlined by Bereiter and Engelmann (1966). While many of the assumptions underlying their programme were accepted as relevant to the type of student population in attendance at the summer programme, their methodology involving "an intensive, fast-paced, highly-structured programme of instruction" (p. 52) was modified. A more relaxed, but nevertheless methodically structured programme, based on the Ellis' (1967) model of pre-school education was used.

In this model four developmental areas were identified for purposes of planning curricular activities:

1) Language
2) Conceptual
3) Perceptual
4) Self-concept

The environment in the pre-school class was pleasant and oriented towards individualizing instruction. Teaching materials, strategies, and programmes were meticulously thought out, and programmed. To achieve the specific goals previously outlined, children were encouraged to verbalize at every opportunity and enthusiastically reinforced socially for their efforts.

Stimuli in the room were adequate and purposeful. The learning environment was not overly crowded and nothing was

included in the classroom unless it served a specific purpose. Room arrangement was orderly and consisted of several clearly designated areas: a book house, a library corner, a block corner, a painting area, a doll house, and a worktable area, for example.

The programme was time-oriented and routines were carefully established and followed.

During free activity, the teacher and two aides were constantly circulating in order to ensure a maximum amount of verbalization on the part of the pupils. Children were required to speak in sentences and to communicate requests verbally. If children were in difficulty, an example was given for purposes of imitation. Every success was enthusiastically reinforced by praise and encouragement.

During the opening exercises, opportunities were found for counting ("How many children came today?"), and for classifying students ("boys", "girls", "those with red sweaters"). Rhythmic experiences were planned around the rhythm band to allow for auditory discrimination training. Songs were adapted to utilize common tunes and desired verbal patterns (an alphabet song was composed, for example, using a simple C-E-G-E-C scale).

During the structured group activities, instructional materials were used to facilitate specific verbal patterns. Identity statements were required, for example, in answer to the question-picture situation: "What is this?" Sorting and classifying activities were based on concrete materials and verbal

requests. ("Put the blue pins in this box and the yellow pins in this box.")

Children were required to listen to and follow specific directions. ("Bring me a blue block" and later, "Get a blue block and put it on the piano stool.")

Visual discrimination tasks requiring knowledge of similarities and differences were utilized in readiness activities.

Number activities based on concrete experiences were structured according to the needs of the child.

The classroom climate was generally characterized by purposeful verbalization and activity. Children were encouraged to cooperate, to act responsibly, and were socially reinforced for their efforts.

The story time was planned to give the children as much individual attention as possible and to allow for a maximum of social interaction. The teachers , aides, and some of the senior pupils in the orientation class were involved actively often allowing a one-to-one relationship between the child and "story-teller". Tape recorders were successfully used in this connection.

In strategies designed to develop the child's self concept, a mirror was found to be effective.

Physical contact was utilized by teachers and aides. The children appeared to need a great deal of such contact and seemed to find acceptance through the medium of touch.

It would be difficult to outline each activity and its purpose. Generally, however, it might be said that the programme was characterized by its individualized approach, its clarity for the child, and its requirement of verbalization. No overt, high-pressure tactics were employed. The atmosphere was pleasant, and characterized by an expectation of pupil cooperation and verbalization.

Although it must be stated that no child was allowed to sit back quietly it can also be said that at no time was it necessary for the teacher or the aides to raise their voices or to employ overt punitive measures to achieve involvement and verbalization by the children. No child was ever slapped or shut in a dark closet, for example, as has been suggested in one current programme (Bereiter & Engelmann, 1966, p. 87 - 88). On the other hand, children were handled firmly when, in the opinion of the teacher, they were violating one of the desired and clearly established patterns of behavior. For example, no request was granted unless it was verbalized. If in the opinion of the teacher, the child did not have the required verbal pattern in his repertoire, a "model" was given to the child and verbal imitation required.

Children were expected to "follow through" on activities and if pupils acted contrary to the routines of the group, providing such routines were clearly understood by the children, the natural consequences were forthcoming. (If a child aggressively took something from another child, for example, he was

made to give it back.) Often the teacher would verbalize the situation, and correct it by physically helping the child return the toy and by directing the pupil's attention to another specific activity of interest.

Orientation Group (Ages 7 - 13)

| | Daily Programme |
|---|---|
| 8:30 - 9:00 a.m. | Arrival<br>Arrangement of materials and equipment for day's activities. |
| 9:00 - 10:30 a.m. | Individual and group activities<br>- individualized reading sessions<br>- games, group and individual |
| 10:30 - 10:45 a.m. | Washroom.<br>Milk and cookies. |
| 10:45 - 11:00 a.m. | Outside activities. |
| 11:00 - 11:20 a.m. | Individual and group activities<br>- individualized reading sessions<br>- group story-time (orientation children reading to children in the pre-school and pre-kindergarten groups)<br>- "games" for processing information<br>- free-choice time. |
| 11:20 - 11:30 a.m. | Clean-up and dismissal of children |
| 11:30 - 12:30 p.m. | Planning session with aides |
| 12:30 - 1:15 p.m. | Group lunch (teachers, aides, and visitors) |

Comments

In formulating the objectives for the children in the orientation group the faculty held discussions with various school personnel who were familiar with each child's educational history. As a consequence it was learned that generally, these children needed a great deal of additional help within the general area of language arts, especially with regard to reading as a source of enjoyment and information. A difficulty common to many of the children in this group, which represented a spread in grade placement from grade one to grade six, seemed to be a poorly developed ability to handle information at any level other than simple memory.

Two other areas of special need were outlined by the teachers who were well acquainted with these children. It was suggested to the teacher that this group of children would be found to demonstrate: (a) a relatively low level of self-confidence and (b) feelings toward school in general that would not be positive. These comments were based on the observations that for this group of children failure in school-type activities, especially reading, was quite common and that attendance tended to be irregular.

With this information the programme was organized around two main kinds of activities, individualized oral reading, and "games" which could be used to help the children learn to accumulate and process information at levels other than memory.

The involvement and success of each child in these activities were constantly in the minds of the teacher and aides. In addition to the information "games", purposeful "fun" games were planned for either individual or group participation. Some of these, for example, were softball, checkers, free play with the tape-recorder, table-hockey, skipping rope, roller skating, tetherball and puzzles. These were incorporated in the school day before class began, at snack time, or during the occasional times from 11:00 to 11:30 when free choice of activities was permitted.

The individualized reading programme was organized around a daily 15 - 20 minute oral-reading session for each child with one of the teen-aides. Each child, with the help of the teacher and a teen-aide, chose a book of interest to him which he could read with a minimum of difficulty. Specific instructions were given the aides in terms of how to conduct the reading sessions in order to meet the objectives stated.

The objectives of the first two-week session were mainly those of the child's gaining enjoyment from reading and learning to recognize and name the words which were meaningful for him. No effort was made to teach a child a "new" word in terms of a concept he had not yet acquired. Each day a few of the words which the child had difficulty pronouncing were printed by the aides on 3 x 5 cards and extra practice given the child to help him learn to recognize and name those words. No effort was

made to have the child explain or discuss the material he was reading.

Because reading, for most of these children, had not been a source of satisfaction in the past, it was with some degree of difficulty that the aides were able to get the children to participate. Furthermore, because most of the children seemed to be easily distracted by stimuli in the room, isolated reading booths were constructed from large sheets of cardboard and placed in less "noisy" parts of the school building.

Material reinforcement, in the form of raisins, was introduced and made contingent upon cooperating in the oral reading session. Much social reinforcement was paired with the material reinforcement and by the second week it was possible to withdraw completely the use of raisins without any decrease in the children's willingness to read with an aide. In fact, success in reading along with the aide's attention became very powerful sources of motivation.

The objectives for the last two weeks of the individual reading sessions were focused on helping the child comprehend and translate into his own words what it was he was reading aloud. The aides were instructed to encourage the children to verbalize in complete sentences the meanings of the stories being read and to provide generous amounts of social reinforcement for attempts on the children's part to do so even if the effort was not perfect. Aides were shown how to provide verbal models for the children in their attempts to expand verbal responses to complete

thoughts. A list of all books completed was kept for each child. The objectives of gaining pleasure from oral reading and gaining in self-confidence through success were continued during these two weeks by having the children read aloud to one or two of the pre-school and pre-kindergarten children.

Because there were two aides to help in the individualized reading sessions, there were two children reading outside of the classroom at any given time during the morning. The pupils remaining in the class were involved in information "games". Working as one group with the teacher, pupils played a variety of verbal "games" designed to help them overcome a pronounced inability to accumulate information and to use it either to gain more information or to solve a problem. At the simple memory level Indian pupils in the orientation class were able to function quite well. However, at any higher level such as translation, interpretation, application, analysis, synthesis or evaluation these children found verbal tasks almost impossible. Furthermore, they found it difficult to handle in the abstract more than a single variable at once. Classifying objects in terms of shape and colour, or size and shape, for example, was difficult for them. At the same time, however, most of the group was able to handle more than one variable if the variables were considered in a series.

The "games" used to help the children in the area of accumulating and using information included: (a) telling simple

fables from which the children were to find meanings which they could put into their own words or which they could apply to related contexts which had meaning for them, and which they could recognize again; (b) using a statement such as "There is something in the room I'm thinking of, it is ...." and then giving a series of clues; (c) hiding objects behind a visual barrier with a child giving descriptive clues about the object to the other children in order to help them guess the object; (d) using the "twenty questions" type of approach in order to find which of a variety of eight paper cups with different designs on them had a raisin hidden under it, or to find which boy or girl in the room the teacher was thinking about.

Considerable practice was given the children in managing their own behavior and in accepting responsibility both in the classroom and on the playground. Definite rules of procedure and conduct were established and the children helped to operate independently within this framework. The teacher and aides at no time made use of physical punishment or shouting at children as control techniques. The point of emphasis in terms of helping the children learn better patterns of self-control rather than simply complying to rules was that of applying positive social reinforcement for behavior that was considered appropriate. A professional firmness on the part of the teacher and aides was used consistently with regard to causing a child to realize the natural consequences of his own behavior and to help him follow through on a course of action that would lead to reinforcement.

At no time was a child made to feel personally rejected by teachers or aides. However when his behavior was considered unacceptable it was made apparent to him along with a realization that there was a more appropriate way of behaving. Furthermore, it was always clear to the child that the choice of how to behave was his own to make. Positive social reinforcement, often conveyed through direct physical contact, was found to have a high motivating value for the children. In addition, reinforcement tended to generalize in the sense that soon the children reinforced each other for appropriate self-directed behavior or for personal accomplishments.

## V. Evaluation

Because the nature of the programme was exploratory and because it was of short duration (four weeks) little attempt was made to consider the programme using statistical analyses. However, in terms of assessing the direction of progress of the children in meeting the objectives outlined for them, a careful assessment was made of each child by the faculty members who were assisted in this task by the teaching aides. Some of the more evident trends appear to be as follows:

### Affective Area

During the four week programme, there was a mean increase in attendance ($\bar{X}$ = 35 during the first week and $\bar{X}$ = 43 during the fourth week.) The highest mean attendance occurred during the third week ($\bar{X}$ = 48). The decrease in attendance during the last week occurred largely because employment opportunities for the parents increased during that time and many families moved

from the reserve. One pupil went to the hospital with the result that her two younger sisters were not able to attend. The increase in attendance would appear to indicate the programme was successful in terms of meeting the general objectives in the affective area. Specifically, the children appeared to increase their interest level in participating in school activities by virtue of their increased attendance.

In terms of developing an interest in books and in reading, success was evident through an increase in the numbers of children voluntarily asking for stories, using the available books, and requesting to take books home. In the pre-school group, children were often waiting their turns to get into the "book house". It is of interest to note that no extraneous stimuli were present in the "book house". The atmosphere was quiet, controlled, and the children's rule that "We read in the book house" was voluntarily followed. Pupils in the book house were self-directing in the management of their behaviors. Transgressors were reprimanded by the children themselves.

In the orientation group, success was evidenced through observing that children volunteered to read with an aide by the second week. By that time material reinforcement was no longer necessary and success in reading appeared to provide its own reinforcement. Also in this group, it was observed that children chose reading as an activity during the free-choice periods.

In all groups, the programme was time-oriented and children at all age levels soon liked and responded well to

routine classroom management. This would appear to suggest success in helping the pupils receive (attend) and respond appropriately to relevant stimuli in the school setting.

The general overall improvement in the quantity and quality of the children's verbalization both with their peers and with significant adults would appear to be indicative of growth in self-confidence. This type of response (verbalization) did not appear to be situation-specific and was observed to transfer to visitors to the school towards the end of the programme. Also, there was a noticeable increase in the children's willingness to look at themselves in a full length mirror and to have their pictures taken. In fact, at the end of the programme children were competing with each other for these privileges. Another evidence of growth in self-concept appeared to manifest itself in the children's desire to use the tape recorder. The fact that pupils in the orientation group were able to maintain a lively participation in the information "games" for periods of time running beyond an hour can be interpreted as evidence that the objectives of being able to attend to relevant stimuli, and to increase interest in dealing with information at levels beyond simple memory were well met by the programme.

Cognitive Area

In realizing the objective of improvement in the quantity of verbalization, stress was placed on "greeting-response" by the children. In the pre-school group, on day one, two out

of sixteen children (14%) responded verbally to the greeting "Hello". On the last day of the programme, eighteen out of nineteen (95%) responded verbally to the same greeting.

There was a noticeable general increase in the purposeful noise level throughout the four-week period in all three classrooms. The general tone changed from being that of a basically "quiet-watchful" type of environment to one of talking and involvement by the children. A quote from a local press release written by an independent observer reflects this observation:

> "A steadily rising noise level was one measure of success in a four-week summer course --- the sound of voices is music to the ears of the three teachers and six teen-aged aides."

There was a definite growth in the children's ability to use effective sentence patterns throughout the programme. One indication of this was shown by the recorded descriptions given by children in the pre-school group in explanation of their art work. Initially, for example, one child (aged six) described his picture as being a "pirate-boat". Half-way through the programme, his picture description was as follows:

> "This is a pig-pen with the pig drinking some water. This is a farm. There is a horse in the farm. There is a pig. There is a duck. These are corn."

On the final day, the following was volunteered in response to the request which had been made throughout -- "Tell me what you have painted":

"This is a moon. This is a rocket. That's earth. The rocket is flying on the moon. There are moon creatures. This is a spaceman floating on the air. He went up there to look at the moon. People are looking at the moon with a telescope at the observatory."

No one would suggest that the verbal repertoire of this child had increased in a four-week period from the simple, concise, "label statement" to the degree of complexity indicated in the descriptions of "the telescope at the observatory". However, the important point to note is the degree of sophistication in the vocabulary repertoire of this child — a level which would not be suspected, nor indeed uncovered, by a teacher working with the controlled (but often meaningless to these children) vocabulary of the regular pre-primer.

Another specific trend in the improvement of quality of verbalizations was noted in a pre-post test of language patterns administered to eight children in the pre-school group by a teen-aide. Children were given alternate forms of the Imitation-Comprehension-Production Test (Brown, et al, experimental edition). They were shown 22 pairs of pictures and asked to point to the one indicated by a verbal description given by the aide, such as: "The girl is reading"; "The girl is not reading"; "The bird in the cage"; "The bird cage". The aide sat behind the subject in each case to minimize the possibility of non-verbal cueing and instructions were read to insure

uniformity. The same aide conducted both the pre- and the post-test. Sentence patterns examined by the test were:

- negatives
- prepositions
- possessive pronouns
- verb-to-be (is/are) singular-plural
- active voice
- passive voice
- future tense
- past tense
- present-indicative construction
- adjectival formation
- indirect object

A sign test (Wilcoxin) for differences between related samples was used in analyzing the data. Improvement in scores was significant at the .01 level.

It should be noted that although improvement in language patterns as measured by this test achieved a significance level of .01, no control was exercised over the possibility that there may have been an improvement in the aide-pupil communication variable over the four week period. Nevertheless, the magnitude and consistency of improvement for the group would appear to be indicative of a positive effect as a result of treatment and the area, therefore, clearly in need of further controlled research.

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Insert Table I about here

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Table Two summarizes the percent-gain scores for each item for the pre-school group on the basis of the pre- and post-test scores. Table Three summarizes the gains made on the individual items for only those children taking both the pre- and post-tests.

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Insert Table II about here

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Insert Table III about here

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In planning the objectives for the programme on the basis of the pre-test in language patterns, the teacher designed activities which would specifically guide the children in the desired verbal patterns. Because of the shortness of the programme, however, priorities were established. No learning activities were planned for the indirect object construction. It is noted from the table that no gain occurred in this area. On the basis of these data, it would seem that improvement in children's verbal patterns can be methodically, even dramatically, brought about by specific teaching. On the other hand,

although some gain was evident in most other language patterns, it was least evident when a "non-specific" methodology was emphasized. Thus, when no specific objective was formulated and taught for, growth did not occur.

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Insert Table IV about here

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Table Four shows a comparison of language patterns between the pre-school group and the orientation group. It is interesting to note that the same three items (indirect objective, future tense, and possessive pronouns) were the poorest for both groups. At the same time, negatives and the present indicative construction were best for both groups. These data suggest that for these children language patterns remain relatively consistent over age. Although some improvement appears to occur with time, it is evident that improvement is less than that which occurs as a result of assessment and specific, directed teaching (Table II).

An increase in the interest level of books was evident during the programme. Whereas initially most children tended to avoid books, the book corner, or the book house, by the end of the programme, almost all children were able to receive and attend to story activities and, in fact, to gain enjoyment from such experiences. Measures of success in this area would be the increasing numbers of children who voluntarily chose "reading"

as an activity in free time, the requests which were forthcoming to take books home, and the desire on the part of all children to participate in the individual story-time sessions.

Arithmetic activities were planned for all groups. Both incidental and planned sessions were employed in such activities as sorting, classifying, categorizing, one-to-one correspondence, two-to-one correspondence, and counting.

Within the general area of accumulating and processing information, an interesting observation was made among the group of children in the orientation class. It was found that these children, as a group, functioned well in terms of remembering factual information but could do little else with it. They experienced little success, for example, in their attempts to apply factual information to the solving of problems, to explain in their own words the meaning of various bits of information, and to make use of any information they had gained in order to acquire more. An example of this occurred in the limited way in which the children were able to handle short stories such as fables. It was noted that pupils remembered clearly specific details of fact which occurred in a fable but found it difficult to say in their own words what the story meant or was about. Furthermore, even when given help in arriving at a meaning from a fable, they were unable to transfer that meaning to another situation, especially if the situation held little significance for them. This would seem to indicate that reading for many

of these children was simply an exercise in the naming of words. Because of a limited verbal repertoire in terms of richness of word meaning, reading was little more than verbalizing the memory of what letter configuration represented. When a definite attempt was made on the part of the teacher to help the children learn to handle information at higher levels than simple memory, the results were rewarding. Within three weeks noticeable improvement occurred for all but two of the children.

Psychomotor Area

In all three programmes, activities were planned which were specifically designed to refine the child's perceptual abilities. In the pre-school group, for example, auditory discrimination activities were planned around a rhythm band. All groups used such devices as pictures and concrete materials for visual discrimination activities. Puzzles were helpful in this connection. In the kinesthetic-tactile area, children were encouraged to manipulate materials, to trace patterns, and to describe differences in the feel of things.

Skipping activities, ball skills, roller skating techniques, swinging, sliding, balancing on the see-saw, running and jumping are a few examples of activities planned to help children increase in proficiency in both gross and fine motor skills. Improvement in these areas was assessed on an individual basis and was noticeable throughout the programme.

Additional

Faculty members contacted school personnel to inform them of the programme and of the progress made by individual children.

Visitors from the University came to observe the programme, among them several graduate students interested in curricular objectives.

One of the most rewarding and successful aspects of the entire programme was the noticeable change in the teachers' teen-aides. Specifically, they moved from being a quiet, marginally involved group of teen-agers to being a committed, enthusiastic, essential ingredient in the programme. Aide attendance was 98.8% over the entire programme in spite of the fact that each aide received an honorarium of only forty-five dollars for her total effort. Aides acted as liaison between teachers and children. They were effective as playground supervisors and served as stimuli for children to come to school. They successfully carried out such structured teaching tasks as were required of them. Furthermore, they served as a source of valuable information with respect to family background, current problems in the home, and contacts with parents.

The faculty was impressed with the high calibre of performance of the aides in light of their limited experiential background and training. It seems obvious that teachers' aides can be effectively trained and used in a very short period of time with an on-the-job orientation and can be utilized to improve supervision and instruction in an educational programme

without themselves being para-professionals. Because of the individual orientation of the programme, aides were considered by the faculty to be essential in realizing the objectives set out for the programme.

## VI. Implications for Instruction

On the basis of the teaching experiences of the faculty members during the summer programme, the following implications for the instruction of Indian children seem to be evident:

1. A clear statement of specific, behavioral objectives in terms of learner outcomes seems to be an absolute "must" if the learning experiences are to be purposeful and relevant. Otherwise they may degenerate to a "waffling-around" in subject matter and a use of totally irrelevant learning experiences.
2. The teacher should begin with materials and concepts which already possess some degree of meaningfulness for the child. This implies a continuing emphasis on the process of beginning with the concrete before moving into the abstract as well as on matching a child's present activities with the requirements of the "new" learning task.
3. Teacher expectations for the progress of each child should be held at a level higher than would be implied by a child's being able to remember subject matter.

Teachers need to expect that Indian children will be able to process information at levels beyond simple memory.

4. Much attention needs to be devoted to the task of causing children to be responsible for the management of their own behavior. A "professional firmness" must be exercised by the teacher to insure that children learn to follow-through on tasks begun and don't "opt-out" simply because they would rather sit quietly and not participate.

5. Because Indian children seem to have a difficult time generalizing information gained in one context to other related contexts, a special effort should be made by teachers to "teach for transfer". Children should be helped to grasp the many interrelationships and applications which might be made with any bit of information rather than allowing that information to become fixed to one isolated or specific context. This suggests that a greater emphasis be placed on the process of learning rather than on specific content.

6. In learning situations which require a moderate to high level of prolonged attention to specific detail, an effort should be made to keep irrelevant stimuli at a minimum.

7. It may be necessary to use primary reinforcement (edibles such as raisins, for example) in order to increase the frequency with which certain desirable responses occur. However, a caution in the use of such reinforcement is worth mentioning. Primary reinforcement should always be paired with social reinforcement as well as with success in the task at hand. Otherwise it may become difficult to discontinue the use of the primary reinforcement while maintaining an appropriate level of the desired response.
8. The use of verbal "models" to imitate may prove of special value in helping Indian children improve their quantity and quality of verbalization.
9. Initial verbalization on the parts of very shy, withdrawing children might be increased by the use of indirect methods such as the use of puppets or the tape recorder.
10. The practice of oral reading on an individual basis for pleasure as well as for information needs to be increased. Reading aids or "crutches" should be allowed these children during the process of learning to read. Reading "windows" or "edges", should prove helpful.

## VII. Summary and Recommendations

1. In dealing with Indian children, especially ones who may not be able to profit fully from educational experiences, aides are seen to be essential if individual instruction is to occur. Teacher- (or aide-) pupil ratio should not exceed the composite of one teacher and two aides for every fifteen pupils.
2. Programmes for Indian children should be more than unifaceted. Community involvement and parent education together with essential minimum standards of health and safety for each child appear to be essential as an adjunct to an instructional programme in the school setting. This would appear to necessitate long term programming. Short term, summer-type programmes designed for remediation but lacking in continuity or follow-through appear to make a negligible contribution to the child's over-all adjustment and success in coping with the white society in which he eventually must compete to make a living.
3. In all educational programmes designed and carried out in connection with Indian children and adults, involvement of the Indian community itself in the planning and execution is seen to be essential.
4. There appears to be sufficient evidence that corrective measures are worthwhile if they are clearly defined, specifically executed, and based on careful diagnosis of each

individual's specific over-all needs. This necessitates having qualified personnel who are focusing on both the in-school aspects of the children's experiences and their entire environmental milieu. Adequate funding appears essential. The possibility of an Institute of Indian Research and Development being established within a university framework should be explored. Full-time personnel are seen to be essential.

5. In view of the fact there appear to be areas in British Columbia where children manifest characteristics related to school learning which seem to be associated with social status and perhaps race, regularly programmed courses devoted to the education of such children should be incorporated into the teacher education programme at the university level.

6. On the basis of the observations made by the faculty members, it seems valid to suggest that children who are educated in isolation (on the reserve) from the larger communities in which they live, manifest learning difficulties which tend to be cumulative. It is, therefore, felt that consideration should be given to integrating the children who attend school on the reserves with those who attend the neighbouring public school system.

7. If full integration of Indian and non-Indian children were to be brought about, existing Indian-school facilities

might well be used, for example, as adult education centres where programmes could be directed to the examination of issues relevant to the question of integration of Indians with society as a whole.

## REFERENCES

Bereiter, C. and Engelmann, S., Teaching Disadvantaged Children in the Preschool, New Jersey: Prentice-Hall, 1966.

Bloom, B.S., Engelhart, M.D., Furst, E.J., Hill. W.H. and Krathwohl, D.R., Taxonomy of Educational Objectives, Handbook I. Cognitive Domain; New York: David McKay Company, Inc., 1956.

Brown, R., Bellugi-Klima, U., and Fraser, C., Imitation-Comprehension - Production Test. (experimental edition).

Deutsch, Martin, "The Role of Social Class in Language Development and Cognition", American Journal of Orthopsychiatry, XXXV, January, 1965, pp. 78 - 83.

Ellis, Richard R., "Pre-kindergarten education for the disadvantaged child" Disadvantaged Child Volume 1: Seattle: Straub and Hellmuth Publishers, 1967.

Krathwohl, D.R., Bloom, B.S., and Masia, B.B., Taxonomy of Educational Objectives, Handbook II: Affective Domain; New York: David McKay Company, Inc.

Living and Learning The Report of the Provincial Committee on Aims and Objectives of Education in the Schools of Ontario. Toronto: The Newton Publishing Company, 1968. pp. 111-112.

Simpson, E.F. "The Classification of Educational Objectives, Psychomotor Domain", Illinois Teacher of Home Economics, Vol. X, No. 4, Winter, 1966-67.

TABLE I

Pre-post measures for differences in language patterns of a group of pre-school Indian children

| Subject | Pre- | Post- | Difference | $\Sigma +$ | $\Sigma -$ | Wilcoxin Test |
|---|---|---|---|---|---|---|
| 1 | 10 | 11 | +1 | | | |
| 2 | 7 | 11 | +4 | 24 | 0 | 0* |
| 3 | 3 | 8 | +5 | | | |
| 4 | 6 | 11 | +5 | | | |
| 5 | 7 | 9 | +2 | | | |
| 6 | 4 | 8 | +4 | | | |
| 7 | 5 | 7 | +2 | | | |
| 8 | 7 | 8 | +1 | | | |

*Significant at $\alpha = .01$

TABLE II

Percent-gains made, by items, of pre-school groups on language-patterns test

| Items | % Correct Pre-measure (N = 15) | % Correct Pre-measure (N = 8) | % Change |
|---|---|---|---|
| Negatives | 87 | 100 | +13 |
| Prepositions | 53 | 100 | +47 |
| Possessive Pronouns | 27 | 75 | +48 |
| Is/Are | 53 | 75 | +22 |
| Active | 53 | 88 | +35 |
| Passive | 34 | 75 | +41 |
| Future | 13 | 100 | +87 |
| Past | 47 | 63 | +16 |
| Present Indicative | 60 | 75 | +15 |
| Adjectives | 47 | 75 | +28 |
| Indirect Object | 20 | 20 | 0 |

TABLE III

Absolute gains made, by items, of pre-school group on pre-post measure on language-patterns test

| Items | Numbers Correct | | Change |
|---|---|---|---|
| | Pre-measure N = 8 | Post-measure N = 8 | |
| Negatives | 7 | 8 | +1 |
| Prepositions | 4 | 8 | +4 |
| Possessive Pronouns | 2 | 6 | +4 |
| Is/Are | 4 | 6 | +2 |
| Active | 4 | 7 | +3 |
| Passive | 3 | 6 | +3 |
| Future | 2 | 8 | +6 |
| Past | 5 | 5 | 0 |
| Present Indicative | 5 | 7 | +2 |
| Adjectives | 4 | 7 | +3 |
| Indirect Object | 2 | 2 | 0 |

TABLE IV

Comparison of percent-right scores between pre-school and orientation groups on the basis of pre-test of language patterns

| Items | % Correct Pre-School N = 15 | % Correct Orientation N = 16 |
|---|---|---|
| Negatives | 87 | 100 |
| Prepositions | 53 | 88 |
| Possessive Pronouns | 27 | 44 |
| Is/Are | 53 | 75 |
| Active | 53 | 88 |
| Passive | 34 | 75 |
| Future | 13 | 46 |
| Past | 47 | 56 |
| Present Indicative | 60 | 97 |
| Adjectives | 47 | 97 |
| Indirect Object | 20 | 31 |